

Table of Contents

Volume 43, 1990

Number 1 January

Effects of continuous grazing on habitat and density of ground-foraging birds in south Texas— <i>Denise L. Baker and Fred S. Guthery</i>	
Distribution of nitrogen fractions in grazed and ungrazed fescue grassland Ah horizons— <i>Johan F. Dormaar, Sylver Smoliak, and Walter D. Willms</i>	
Soil moisture patterns below mounds of harvester ants— <i>John W. Laundré</i>	
Ecology of curlleaf mahogany in western and central Nevada: community and population structure— <i>B.W. Schultz, P.T. Tueller, and R.J. Tausch</i>	
Seedbed ecology of winterfat: effects of mother-plant transpiration, wind stress, and nutrition on seedling vigor— <i>D. Terrance Booth</i>	
Herbage production-forest overstory relationships in two Arizona ponderosa pine forests— <i>Luis A. Bojorquez Tapia, Peter F. Efolliott, and D. Phillip Guertin</i>	
Responses of endophyte-bearing and endophyte-free varieties of <i>Lolium perenne</i> L. to fungicide treatment and simulated herbivory— <i>Ralph E.J. Boerner, Amy J. Scherzer, and Blake G. Sturgis</i>	
Control of honey mesquite with herbicides: influence of plant height— <i>P.W. Jacoby, C.H. Meadors, and R.J. Ansley</i>	
Control of honey mesquite with herbicides: influence of stem number— <i>P.W. Jacoby, R.J. Ansley, C.H. Meadors, and C.J. Cuomo</i>	
Effects of manual application method on application time, thoroughness, and tebuthiuron outlays— <i>Nicholas S. Van Pelt and Neil E. West</i>	
Creosotebush control and forage production in the Chihuahuan and Sonoran Deserts— <i>Howard L. Morton, Fernando A. Ibarra-F. Martha H. Martin-R, and Jerry R. Cox</i>	
Nitrogen accumulation and acetylene reduction activity of native lupines on disturbed mountain sites in Colorado— <i>S.T. Kenny and R.L. Cuany</i>	
Clipping and long-term grazing effects on biomass and carbohydrate reserves of Indian ricegrass— <i>Apollo B. Orodho and M.J. Trlica</i>	
Comparative photosynthetic responses of big bluestem to clipping versus grazing— <i>L.L. Wallace</i>	
Comparison of actual and predicted blue oak age structures— <i>Mitchel P. McClaran and James W. Bartolome</i>	
Herbage production of Mediterranean grassland under seasonal and yearlong grazing systems— <i>Mario Gutman, Noam G. Seligman, and Imanuel Noy-Meir</i>	
Comparison of the copper and molybdenum status of yearling steers grazing reclaimed mined-land and native range— <i>J.F. Karn and L. Hofmann</i>	
Estimates of critical thermal environments for mule deer— <i>Katherine L. Parker and Michael P. Gillingham</i>	
A comparison of two furrow opener-depth control assemblies for seeding forage grass— <i>T. Lawrence and F.B. Dyck</i>	
Book Reviews	

Number 2 March

President's Address: SRM Today and Tomorrow— <i>Thomas E. Bedell</i>	89
2 Trampling effects from short-duration grazing on tobosagrass range— <i>Jeffrey R. Weigel, Carlton M. Britton, and Guy R. McPherson</i>	92
6 Tiller defoliation patterns under short duration grazing in tallgrass prairie— <i>Robert L. Gillen, F. Ted McCollum, and Joe E. Brummer</i>	95
10 Stocker cattle performance and vegetation response to intensive-early stocking of Cross Timbers rangeland— <i>F.T. McCollum, R.L. Gillen, D.M. Engle, and G.W. Horn</i>	99
13 Vegetation response to increased stocking rates in short-duration grazing— <i>Michael H. Ralphs, M. Mort Kothmann, and Charles A. Taylor</i>	104
20 Influence of range site on diet selection and nutrient intake of cattle— <i>Karen L. Launchbaugh, Jerry W. Stuth, and J.W. Holloway</i>	109
25 Sand shinnery oak as forage for Angora and Spanish goats— <i>Francis Villena and James A. Pfister</i>	116
29 Diet composition of Angora goats in a short-duration grazing system— <i>Charles A. Taylor, Jr., and Merwyn M. Kothmann</i>	123
33 Conditioned taste aversion: potential for reducing cattle loss to larkspur— <i>Mark A. Lane, Michael H. Ralphs, John D. Olsen, Frederick D. Provenza, and James A. Pfister</i>	127
36 Survival of juvenile basin big sagebrush under different grazing regimes— <i>M.K. Owens and B.E. Norton</i>	132
39 Biases in relative estimates of dietary mineral status from esophageal extrusa— <i>W.E. Pinchak, L.W. Greene, and L.J. Hunt</i>	136
43 Value of multiple fecal indices for predicting diet quality and intake of steers— <i>Eneas R. Leite and Jerry W. Stuth</i>	139
49 Evaluation of a continuous-release ytterbium bolus— <i>R.E. Estell, A.S. Freeman, M.L. Galyean, and J.D. Wallace</i>	144
49 California's privately owned oak woodlands: Owners, use, and management— <i>Lynn Huntsinger and Louise P. Fortmann</i>	147
52 Establishment and survival of Illinois bundleflower interseeded into an established kleingrass pasture— <i>R.L. Dovel, M.A. Hussey, and E.C. Holt</i>	153
58 Above-ground phytomass dynamics in a grassland steppe of Patagonia, Argentina— <i>Guillermo E. Defossé, M.B. Bertiller, and J.O. Ares</i>	157
61 Interpretation of environmental gradients which influence sagebrush community distribution in northeastern Nevada— <i>Mark E. Jensen</i>	161
64 Stratification, freezing, and drying effects on germination and seedling growth of Altai wildrye— <i>J.T. Romo</i>	167
69 Relationship of photosynthetic rate and edaphic factors to root carbohydrate trends in honey mesquite— <i>Changgui Wan and Ronald E. Sosebee</i>	171
73 Mid-winter protein, phosphorus, and digestibility of <i>Chrysomammus nauseosus</i> subspecies— <i>R.B. Bhai, Bruce L. Welch, D.J. Weber, and E. Durant McArthur</i>	177
82 Book Reviews	181

Table of Contents

Volume 43, 1990

Number 1 January

Effects of continuous grazing on habitat and density of ground-foraging birds in south Texas— <i>Denise L. Baker and Fred S. Guthery</i>	
Distribution of nitrogen fractions in grazed and ungrazed fescue grassland Ah horizons— <i>Johan F. Dormaar, Sylver Smoliak, and Walter D. Willms</i>	
Soil moisture patterns below mounds of harvester ants— <i>John W. Laundré</i>	
Ecology of curlleaf mahogany in western and central Nevada: community and population structure— <i>B.W. Schultz, P.T. Tueller, and R.J. Tausch</i>	
Seedbed ecology of winterfat: effects of mother-plant transpiration, wind stress, and nutrition on seedling vigor— <i>D. Terrance Booth</i>	
Herbage production-forest overstory relationships in two Arizona ponderosa pine forests— <i>Luis A. Bojorquez Tapia, Peter F. Efolliott, and D. Phillip Guertin</i>	
Responses of endophyte-bearing and endophyte-free varieties of <i>Lolium perenne</i> L. to fungicide treatment and simulated herbivory— <i>Ralph E.J. Boerner, Amy J. Scherzer, and Blake G. Sturgis</i>	
Control of honey mesquite with herbicides: influence of plant height— <i>P.W. Jacoby, C.H. Meadors, and R.J. Ansley</i>	
Control of honey mesquite with herbicides: influence of stem number— <i>P.W. Jacoby, R.J. Ansley, C.H. Meadors, and C.J. Cuomo</i>	
Effects of manual application method on application time, thoroughness, and tebuthiuron outlays— <i>Nicholas S. Van Pelt and Neil E. West</i>	
Creosotebush control and forage production in the Chihuahuan and Sonoran Deserts— <i>Howard L. Morton, Fernando A. Ibarra-F. Martha H. Martin-R, and Jerry R. Cox</i>	
Nitrogen accumulation and acetylene reduction activity of native lupines on disturbed mountain sites in Colorado— <i>S.T. Kenny and R.L. Cuany</i>	
Clipping and long-term grazing effects on biomass and carbohydrate reserves of Indian ricegrass— <i>Apollo B. Orodho and M.J. Trlica</i>	
Comparative photosynthetic responses of big bluestem to clipping versus grazing— <i>L.L. Wallace</i>	
Comparison of actual and predicted blue oak age structures— <i>Mitchel P. McClaran and James W. Bartolome</i>	
Herbage production of Mediterranean grassland under seasonal and yearlong grazing systems— <i>Mario Gutman, Noam G. Seligman, and Imanuel Noy-Meir</i>	
Comparison of the copper and molybdenum status of yearling steers grazing reclaimed mined-land and native range— <i>J.F. Karn and L. Hofmann</i>	
Estimates of critical thermal environments for mule deer— <i>Katherine L. Parker and Michael P. Gillingham</i>	
A comparison of two furrow opener-depth control assemblies for seeding forage grass— <i>T. Lawrence and F.B. Dyck</i>	
Book Reviews	

Number 2 March

President's Address: SRM Today and Tomorrow— <i>Thomas E. Bedell</i>	89
2 Trampling effects from short-duration grazing on tobosagrass range— <i>Jeffrey R. Weigel, Carlton M. Britton, and Guy R. McPherson</i>	92
6 Tiller defoliation patterns under short duration grazing in tallgrass prairie— <i>Robert L. Gillen, F. Ted McCollum, and Joe E. Brummer</i>	95
10 Stocker cattle performance and vegetation response to intensive-early stocking of Cross Timbers rangeland— <i>F.T. McCollum, R.L. Gillen, D.M. Engle, and G.W. Horn</i>	99
13 Vegetation response to increased stocking rates in short-duration grazing— <i>Michael H. Ralphs, M. Mort Kothmann, and Charles A. Taylor</i>	104
20 Influence of range site on diet selection and nutrient intake of cattle— <i>Karen L. Launchbaugh, Jerry W. Stuth, and J.W. Holloway</i>	109
25 Sand shinnery oak as forage for Angora and Spanish goats— <i>Francis Villena and James A. Pfister</i>	116
29 Diet composition of Angora goats in a short-duration grazing system— <i>Charles A. Taylor, Jr., and Merwyn M. Kothmann</i>	123
33 Conditioned taste aversion: potential for reducing cattle loss to larkspur— <i>Mark A. Lane, Michael H. Ralphs, John D. Olsen, Frederick D. Provenza, and James A. Pfister</i>	127
36 Survival of juvenile basin big sagebrush under different grazing regimes— <i>M.K. Owens and B.E. Norton</i>	132
39 Biases in relative estimates of dietary mineral status from esophageal extrusa— <i>W.E. Pinchak, L.W. Greene, and L.J. Hunt</i>	136
43 Value of multiple fecal indices for predicting diet quality and intake of steers— <i>Eneas R. Leite and Jerry W. Stuth</i>	139
49 Evaluation of a continuous-release ytterbium bolus— <i>R.E. Estell, A.S. Freeman, M.L. Galyean, and J.D. Wallace</i>	144
49 California's privately owned oak woodlands: Owners, use, and management— <i>Lynn Huntsinger and Louise P. Fortmann</i>	147
52 Establishment and survival of Illinois bundleflower interseeded into an established kleingrass pasture— <i>R.L. Dovel, M.A. Hussey, and E.C. Holt</i>	153
58 Above-ground phytomass dynamics in a grassland steppe of Patagonia, Argentina— <i>Guillermo E. Defossé, M.B. Bertiller, and J.O. Ares</i>	157
61 Interpretation of environmental gradients which influence sagebrush community distribution in northeastern Nevada— <i>Mark E. Jensen</i>	161
64 Stratification, freezing, and drying effects on germination and seedling growth of Altai wildrye— <i>J.T. Romo</i>	167
69 Relationship of photosynthetic rate and edaphic factors to root carbohydrate trends in honey mesquite— <i>Changgui Wan and Ronald E. Sosebee</i>	171
73 Mid-winter protein, phosphorus, and digestibility of <i>Chrysomammus nauseosus</i> subspecies— <i>R.B. Bhai, Bruce L. Welch, D.J. Weber, and E. Durant McArthur</i>	177
82 Book Reviews	181

Number 3 May

Variability of crude protein in crested wheatgrass at defined stages of phenology—Raymond F. Angell, Richard F. Miller, and Marshall R. Haferkamp	186
Mefluidide effect on Caucasian bluestem leaves, stems, forage yield, and quality—Larry M. White	190
Variability for seed size and yield in two tall dropseed populations—A. Boe	195
Defoliation frequency and intensity effects on pasture forage quality—Iraj Motazedian and Steven H. Sharrow	198
Nutritional characteristics of important desert grasses in Saudi Arabia—Unab G. Bokhari, Faisal Alyaesh, and Mohmood Al-Noori	202
Spring burning Japanese brome in a western wheatgrass community—Steven G. Whisenant and Daniel W. Uresk	205
Effects of spring headfires and backfires on tallgrass prairie—Terrence G. Bidwell, David M. Engle, and P. Larry Claypool	209
Regeneration of woody species following burning and grazing in Aspen Parkland—A.W. Bailey, B.D. Irving, and R.D. Fitzgerald	212
Recurrent phenotypic selection for low grasshopper food preference in rangeland alfalfa—J.D. Berdahl, G.B. Hewitt, and R.H. Miller	216
Macro and trace mineral content of selected south Texas deer forages—Thomas G. Barnes, Larry W. Varner, Lytle H. Blankenship, Thomas J. Fillinger, and Sharon G. Heineman	220
Ash-free indigestible acid detergent fiber as an internal marker to estimate digestibility with grazing ruminants—M.L. Nelson, L. Motjope, J.W. Finley, and S.M. Parish	224
Effects of domestic goats on deer wintering in Utah oakbrush—Robert A. Riggs, Philip J. Urness, and Karen A. Gonzalez	229
Effect of grazing by sheep on the quantity and quality of forage available to big game in Oregon's Coast Range—Bruce D. Rhodes and Steven H. Sharrow	235
Relationship between phosphorus intake and blood or fecal phosphorus in gestating cows—D.W. Sanson, G.L. Walker, D.C. Clanton, and K.M. Eskridge	238
The effect of manager risk attitudes on range improvement decisions—Daniel J. Bernardo and David M. Engle	242
Managing individual juniper and pinyon infestations with pelleted tebuthiuron or picloram—Thomas N. Johnsen, Jr., and Raymond S. Dalen	249
Clipping date effects on soil water and regrowth in crested wheatgrass—Richard F. Miller, Marshall R. Haferkamp, and Raymond F. Angell	253
Effect of soil water, nitrogen, and growing degree-days on morphological development of crested and western wheatgrass—A.B. Frank and R.E. Ries	257
Soil chemical properties during succession from abandoned cropland to native range—Johan F. Dormaar, Sylvester Smoliak, and Walter D. Willms	260
Old World bluestem responses to nitrogen fertilization—William A. Berg	265
Classifying herbivore diets using hierarchical cluster analysis—Michael L. McInnis, Larry L. Larson, and Martin Vavra	271
Power requirements of an imprinter and rangeland drill—Dale E. Wilkins, Marshall R. Haferkamp, and David C. Ganskopp	274
Sodium concentration in germination blotters—D.R. Morgan and D.T. Booth	276
Book Reviews	277

Number 4 July

Using multivariate techniques to quantitatively estimate ecological stages in a mixed grass prairie—Daniel W. Uresk	282
Mycorrhizal influences on big bluestem rhizome regrowth and clipping tolerance—B.A.D. Hetrick, G.W.T. Wilson, and C.E. Owensby	286
Seed abscission and retention in Indian ricegrass—R.D.B. Whalley, T.A. Jones, D.C. Nielson, and R.J. Mueller	291
Differences in riparian vegetation structure between grazed areas and exclosures—Terri Tucker Schulz and Wayne C. Leininger	295
Grazing and plant growth interactions in a semiarid <i>Festuca pallens</i> grassland (Patagonia)—Mónica B. Bertiller and Guillermo E. Defossé	300
Effect of long-term, year-long grazing at moderate and heavy rates of stocking on diet selection and forage intake dynamics—William E. Pinchak, Stephen K. Canon, Rodney K. Heitschmidt, and Steven L. Dowhower	304
High-performance short-duration and repeated-seasonal grazing systems: Effect on diets and performance of calves and lambs—Jerry D. Volesky, James K. Lewis, and Charles H. Butterfield	310
Methods of administering ytterbium for estimation of fecal output—Patrick G. Hatfield, Donald C. Clanton, David W. Sanson, and Kent M. Eskridge	316
Relationships between pasture forage components and fecal chemical composition—J.F. Karn and L. Hofmann	320
Soil and vegetation responses to sewage sludge on a degraded semiarid broom snakeweed/blue grama plant community—P.R. Fresquez, Richard E. Francis, and G.L. Dennis	325
Abundance, seed pod nutritional characteristics, and seed germination of leguminous trees in South Kordofan, Sudan—Ibrahim M. Hashim	333
Nonstructural carbohydrates and spring regrowth of two cool-season grasses: Interaction of drought and clipping—C.A. Busso, J.H. Richards, and N.J. Chatterton	336
Silicon uptake and distribution in <i>Agropyron smithii</i> as related to grazing history and defoliation—M.S. Cid, J.K. Detling, A.D. Whicker, and M.A. Brizuela	344
Epicuticular wax in honey mesquite: Seasonal accumulation and intraspecific variation—P.W. Jacoby, R.J. Ansley, C.H. Meadows, and A.H. Huffman	347
Phenological patterns and adaptations in an <i>Artemisia/Agropyron</i> plant community—Michael D. Pitt and Brian M. Wikeem	350
Soil surface characteristics and emergence of big sagebrush seedlings—James A. Young, Raymond A. Evans, and Debra Palmquist	358
Lehmann lovegrass in southeastern Arizona: Biomass production and disappearance—Jerry R. Cox, G.B. Ruyle, and B.A. Roundy	367
Book Reviews	373

Number 5 September

Supplementation and monensin effects on digesta kinetics I. Cattle grazing summer range—Michael G. Ward, Don C. Adams, Joe D. Wallace, M.L. Galyean, and Bradford W. Knapp	378
Supplementation and monensin effects on digesta kinetics II. Cattle grazing winter range—Michael G. Ward, Don C. Adams, Joe D. Wallace, M.L. Galyean, and Jerry D. Volesky	383
Sheep grazing behavior as affected by supplementation—Patrick G. Hatfield, Gary B. Donart, Timothy T. Ross, and Michael L. Galyean	387
Timahdit sheep production and behavior at three stocking rates in the Moyen Atlas of Morocco—A. El Aich, L.R. Rittenhouse, S. El Khamkhami, and T. Ait Mhand	390
Utilization of linear prediction procedures to evaluate animal response to grazing systems—J.A. Winder and R.F. Beck	396
Effects of herbage allowance on defoliation patterns of tallgrass prairie—Holger P. Jensen, Robert L. Gillen, and F. Ted McCollum	401
Genetic variability for elements associated with grass tetany in Russian wildrye—K.H. Asay and H.F. Mayland	407
Components of seed yield in 'Pierre' sideoats grama—A. Boe and J.L. Gellner	411
Overstory-understory relations in pinyon-juniper woodlands in New Mexico—Rex D. Pieper	413
A viewpoint on Indian ricegrass research: Its present status and future prospects—T.A. Jones	416
Warm-season grass establishment as affected by post-planting atrazine application—C.C. Bahler, L.E. Moser, T.S. Griffin, and K.P. Vogel	424
Atrazine and burning in tallgrass prairie infested with prairie threeawn—David M. Engle, Terrence G. Bidwell, Jimmy F. Stritzke, and Dale Rollins	424
Survival and growth of globemallow [<i>Sphaeralcea</i>] species in dry land spaced-plant nurseries—Bruce M. Pendery and Melvin D. Rumbaugh	428
Seedling growth rate of 3 subspecies of big sagebrush—Gordon D. Booth, Bruce L. Welch, and Tracy L.C. Jacobson	432
Water relations of honey mesquite following severing of lateral roots: influence of location and amount of subsurface water—R.J. Ansley, P.W. Jacoby, and C.J. Cuomo	436
Picloram release from leafy spurge roots—Michael V. Hickman, Calvin G. Messersmith, and Rodney G. Lym	442
Root length, leaf area, and biomass of crested wheatgrass and cheatgrass seedlings—Tony Svejcar	446
Role of irrigation and fertilization in revegetation of cold desert mined lands—K.B. Powell, R.B. Vincent, E.J. DePuit, J.L. Smith, and F.E. Parady	449
Effect of grazing and cultivation on some chemical properties of soils in the mixed prairie—Johan F. Dormaar and Walter D. Willms	456
Ermelo weeping lovegrass response to clipping, fertilization, and watering—Robert A. Masters and Carlton M. Britton	461
Germination of 2 legumes in leachate from introduced grasses—Nurdin and Timothy E. Fulbright	466
A time saving tandem method for grinding dried forage samples to a small particle size—N.H. Suttrill and G.L. Lees	468

Number 6 November

Hydrologic modeling of a treated rangeland watershed—Herbert B. Osborn and J. Roger Simanton	474
Crop coefficients for rangeland—J.R. Wight and C.L. Hanson	482
Influence of grazing, vegetative life-form, and soil type on infiltration rates and interrill erosion on a Somalia rangeland—A.A. Takar, J.P. Dobrowolski, and T.L. Thurow	486
Effect of honey mesquite on the water balance of Texas Rolling Plains rangeland—D.H. Carlson, T.L. Thurow, R.W. Knight, and R.K. Heitschmidt	491
Defoliation effects on production and morphological development of little bluestem—J.J. Mullahey, S.S. Waller, and L.E. Moser	497
Leaf conductance and transpiration of winterfat associated with 2 species of wheatgrass on disturbed sites—Charles D. Bonham, Steven E. Mack, and M.J. Trlica	501
The effect of water stress on phenological and ecophysiological characteristics of cheatgrass and Sandberg's bluegrass—Steven O. Link, Glendon W. Gee, and Janelle L. Downs	506
Vegetation response to time-controlled grazing on Mixed and Fescue Prairie—Walter D. Willms, Sylvester Smoliak, and Johan F. Dormaar	513
Environmental influences on germination of utricles and seedling establishment of 'immigrant' forage kochia—Marshall R. Haferkamp, David C. Ganskopp, Kay L. Marietta, and Bradford W. Knapp	518
Botanical composition of goat diets in thinned and cleared deciduous woodland in northeastern Brazil—Walter H. Schacht and John C. Malechek	523
Influence of two native shrubs on goat nitrogen status—A. Boutouba, J.L. Holecek, M.L. Galyean, G. Nunez-Hernandez, J.D. Wallace, and M. Cardenas	530
Stocking density and production of a supplemented beef herd grazing yearlong on Mediterranean grassland—M. Gutman, Z. Holzer, N.G. Seligman, and I. Noy-Meir	535
Sand bluestem and prairie sandreed establishment—Robert A. Masters, Kenneth P. Vogel, Patrick E. Reece, and Dennis Bauer	540
An evaluation of sample adequacy for point analysis of ground cover—L. Hofmann and R.E. Ries	545
Range condition from an ecological perspective: Modifications to recognize multiple use objectives—Rex D. Pieper and Reldon F. Beck	550
Concepts of carrying capacity and substitution ratios: a systems viewpoint—David L. Scarneccchia	553

